

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph which begins at page 7, line 11, and ends at page 8, line 32, with the following text:

The heating gas used is preferably the waste gas or gases generated by the modules for downstream treatment of raw synthesis gas which can be supplemented by modules using synthesis gas, and/or any fuel available near the unit.

- according to one particular embodiment, the initial oxygenated gas is all or part of the combustion gas available at the outlet of a gas turbine present on site, under a pressure lower than 2×10^5 Pa (absolute), and at a temperature between 500 and 600° C.
- according to another variant of the invention, the oxidizing mixture supplied to step (b) is all or part of the combustion gas available at the outlet of the combustion chamber of a gas turbine associated with the unit, under a pressure between 20 and 50×10^5 ~~abs~~ absolute and at a temperature between 1100 and 1300° C.
- advantageously, the depleted mixture issuing from step (b) is supplied to the gas turbine for the cogeneration of electrical energy.
- advantageously, the depleted mixture at the outlet of the gas turbine is supplied to the preheating furnace.
- advantageously, the pre-reformed hydrocarbon mixture is supplied to step (b) at a pressure differing by not more than 10% from the pressure of the oxidizing mixture supplied to said step (b).
- according to another variant of the invention, the oxidizing mixture supplied to step (b) is formed by all or part of a first combustion gas available at the outlet of a first combustion chamber supplied with a first fraction of combustible gas and with a first oxygenated gas, for example the combustion air available at the discharge of the air compressor of an associated gas turbine.
- advantageously, the oxidizing mixture is available under a pressure between 20 and 50×10^5 Pa ~~abs~~ absolute and at a temperature between 871 and 1100° C.
- advantageously, the pre-reformed hydrocarbon mixture is supplied to step (b) at a pressure differing by not more than 10% from that of the oxidizing mixture.

- advantageously, the depleted mixture issuing from step (b) is mixed with the unused portion of the first combustion gas to feed a second combustion chamber also supplied with a second portion of combustible gas.
- advantageously, the second combustion gas issuing from the second combustion chamber is available under a pressure between 20 and 50 x 10⁵ Pa (absolute) and at a temperature between 1100°C and 1300°C, independent of the operating temperature of the RCMC.
- the second combustion gas issuing from the second combustion chamber is preferably expanded in the gas turbine to generate electricity.
- the combustion gas issuing from the gas turbine is advantageously supplied to the preheating furnace.
- according to another variant of the invention, the initial oxygenated gas is all or part of the waste gas from a unit producing nitrogen from air, containing 25 to 40 molar % of oxygen, available under a pressure above 1.6 x 10⁵ Pa ~~abs~~ (absolute) and at ambient temperature.

AMENDMENTS TO THE DRAWINGS

Figure 4 (and presumably Figure 5) are objected to because the preheating furnace 305/405 are not labeled. Please find annotated replacement sheets for Figures 4 and 5 with these elements identified.